Websites

Semantic zoom gets fashionable at NEC

NEC Corporation claims to have succeeded in developing a web page analysis engine that makes ease of viewing of web pages on a variety of terminals, TVs, PDAs, and mobiles a reality, despite differences in display resolution and screen size.

The layout analysis engine enables extraction of a layout structure that meets with the viewer's needs instinctively. This is achieved through the analysis of colour, size, and position of the title and the multiple domains that constitute the web page, as well as to the formation of the HTML tag that defines the page.

This allows users to easily grasp an overview of the full contents of a web page; and reduces the number of operations needed to reach sought-after information, and achieve ease of viewing even on small screens.

This is achieved by displaying digest pages, which consist of only titles, and detailed pages, which display the full contents related to each title separately.

Through this technology, the environment for web viewing can be actively expanded and the need for contents providers to create various web pages depending on the individual terminal will become obsolete in turn contributing to significant cost creation reductions.

Layout analysis engine main characteristics:
• Tittle extraction: by a method for analysing titles using styles, in addition to the types of HTML tags, the accurate extraction of web page title domains is enabled.

• Layout analysis: Segmentation of web page display elements (or blocks) is done by analysis of the HTML tag's structure and position. Extraction of the layout structure is achieved by grouping titles and their multiple related blocks.

As internet use embeds into our lives, web viewing on various interfaces will increase. A few methods have been developed to convert HTML tags into mobile phones tags. Contents of a webpage were simply divided up so a grasp of information overview was difficult and accessing sought-after information required many operations moving from page to page. This can be time consuming and frustrating.

This new layout analysis engine enables quick and easy information access. By combining this with NEC's own display technology "semantic zoom" automatic generation of web pages offers ease of display on small screens.

The 'semantic zoom' function enables ease of viewing of web pages on lower resolution, or smaller screen terminals. NEC will continue this research toward commercialisation, and aims to improve accessibility through R&D in voice read-over software technologies etc. These will all contribute to the active use of mobile phones and smart homes that actively use the internet.

A quick hunt for semantic zoom & IBM in Google draws 6,960 references. NEC carries only 529 and may have a way to go yet!

Web:http://www.japancorp.net/Article.Asp?Art_ID=5178

The mechanics of publicity: beware the edited Word

One of the most intriguing and possibly dangerous attributes of Microsoft's Office Word 2003 and such variants, is its charming editing facility.

Write a feature and send it for accuracy checking and if this is done on the original document, every change is visible for the author to accept or reject. It's an enormous advance on trying to check an original document against a new one. It's also an option on Adobe pdf files though not everyone has the required software to implement it.

But for Word at least, there is one enormous failing in the publicity area. In the last year, *III-Vs Review* has received at least two dozen press releases not in a final, pristine version but rather in the scored out and amended version.

This, of course, immediately shows up where two or more players disagreed over the combined facts or their attitude to emphasis and is the equivalent of delivering a dish for the day to the news-oriented truffle hound!

As many of the companies in the compound semiconductor industry are not in the league of IBM or even Aixtron, with small team players doubling up valiantly on a host of tasks, be warned.

Word documents for publicity purposes should NOT be dispatched to the third estate in an exposé version!

Eye-tracking zoom analysis

Apparently eyegaze or eye tracking technology reaches a level of accuracy, portability and price to be a viable commercial technique. For websites, it could be the 'must' for those who try to catch consumer or client eyes. Based on the fact that people shown a picture concentrate on only five or six points in it, recording and analysing eye movement and trace patterns, marketers and designers hope to learn what consumers unconsciously even, really want and never vocalise.

Eye movements can be very fast. Fixation on any given point brief. Marketers are less interested in very fast eye movement but more in the gaze across a scene and delay fixations that occur. Fixation points are believed to be cognitive points where thinking occurs and for the marketer, the eye track points directly to likes, dislikes and preferences apparently aligning areas of greatest interest to the centre of the retina while eye gaze systems can determine to 5mm where the eyes have focused on a screen.

Asked to view a web page has the viewer actively looking at all sectors. Unprompted, passive viewing of a website only takes in the most prominent features.

Consumer research focuses on several areas of eye movement: *the scan pattern* eye traces across a scene indicating what is noticed first, second, third and fourth time; *the dwell time* spent on specific areas; *latency* or lapse time between a presented image and the time for it to be noticed; *fixations* or the number of times the eyes change from one region of a scene to another.

This tracking is apparently done using software and hardware which includes an infrared LED to create a 'bright pupil' effect. Systems cost from $50,000 upwards, not counting training, analysis and fieldwork.
Some systems, derived from medical eye research, are analogue and digital systems are still ponderous. Mobile eye track system still remain in the future.

Those who have paid attention to eye tracking research include in their numbers online stock broker E*Trade Financial Corp, auctioneer eBay, search engine Yahoo and, inevitably, Microsoft Corp. Their expenditure will probably be recovered within a few years, while others join the ''eye' merchant movement.

"*Eye of the buyer,*" Richard May. Japan Consumer Market-ing Research Institute.

Web:www.jmrlsi.co.jp/english/eyetools/ACCJ_Journal.pdf

StratEdge designs

http://www.stratedge.com/ site opens on packages and that's what the emphasis is in this nice clean modern looking design which lists hermetic SMT, SE 20, metal packages, LCC, SE50, SMX and high speed digital in its offerings. Packages are followed by filters, and assembly.

The applications sector of VSAT, aerospace and wireless have a focused feel to it.

Application notes cover materials, mechanical, electrical, ASTM-F15 Alloy, Corning (glass) and design guides.

About us and *What's new* lays the emphasis on June's appointment of Tim Going as president and chairman and the management buyout of StatEdge. (How can nothing happened to the company since June? No new hire or sales or emerging product leaves an visitor feeling that nothing much is happening).
The press release history is to be commended for going back to StratEdge acquisition of Package Technologies Inc in September 2000, but even buyers are interested in last quarter 2004.

Sleep research for space, travel and shift work.

To reconcile an astronaut's need for sleep with work schedules, NASA originally developed guidelines Appendix K. These specified how much time to be set aside for sleep and the transitions to and from sleep. It also specified by how much sleep time could change from day to day favouring "trickling in" changes using phase delays to later sleep (by up to 2 hours) similar to traveller's moving sleep times ahead or back to help minimise jet lag.

"The thought was that mission schedulers could trickle in a series of two-hour phase delays without incurring any negative consequences as far as sleep quality and alertness," said lead author of a recent study Dr Timothy Monk, professor of psychiatry at University of Pittsburgh School of Medicine. "However, based on the findings from this experiment, that assumption might be quite wrong." During the study it was found that the circadian pacemaker did indeed adjust itself – but only by about one hour per night rather than the two hours presumed by NASA's protocol. Subjects eventually experienced a massive flattening in the amplitude of their circadian temperature rhythm, indicating that the biological clock was not doing its job properly. This led to significant disruptions in sleep and lowered alertness while awake. More research is need for scientists to advise NASA on how to change its guidelines.

Web: //www.physorg.com/